OIPE JC176
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Version With Markings to Show Changes Made

In the Claims:

Please cancel previous claims 1, 11-16 and 26 without prejudice or disclaimer.

Please amend claims 2, 5, 6, 12-15, 17, 18, and 24 as follows:

2. (Twice amended) The tire pressure monitoring device of claim [1] 27 wherein said housing further comprises:

a lens, a main housing, and a lower housing, wherein said lens is coupled to a first end of said main housing and said lower housing is coupled to a second end of said main housing.

5. (Amended) The tire pressure monitoring device of claim [1] 27 wherein said housing further includes at least one battery.

6. (Amended) The tire pressure monitoring device of claim [1] 27 wherein said flexible membrane is a conductive substance.

12. (Twice Amended) The tire pressure monitoring device of claim [26] 27 further including a conductive seal provided between said lens and said main body.

13. (Twice Amended) The tire pressure monitoring device of claim [26] 27 wherein said power supply is at least one battery.

14. (Twice Amended) The tire pressure monitoring device of claim [26] 27 wherein said signaling means is selected from the group consisting of a light emitting diode (LED), a speaker, a radio frequency (RF) transmitter, and a infrared (IR) transmitter.

15. (Amended) The tire pressure monitoring device of claim [26] 27 wherein said flexible membrane is a conductive substance.

17. (Twice Amended) A tire pressure monitoring device attachable to a tire valve for monitoring tire pressure, said tire pressure monitoring device comprising:

a housing including a means for calibrating said pressure monitoring device with air from a tire, a means for sensing a pressure differential, and a means for signaling said pressure differential.

18. (Amended) A method of monitoring air pressure within a tire, said method

comprising:

providing a tire pressure monitoring device of claim [1] 27;

attaching said tire pressure monitoring device to a tire valve;

calibrating said tire pressure monitoring device with air pressure from the tire;

monitoring a pressure differential between said tire pressure monitoring device and an air pressure of said tire; and

emitting a warning signal when said pressure differential exceeds a predetermined pressure differential.

24. (Amended) A valve cap having an interior air pressure supplied through a conventional tire valve, said valve cap comprising:

a transparent top;

a light emitting diode (LED) attached to a printed circuit board;

an upper housing coupled to a lower housing, [an] the upper housing which accommodates the LED, [and] the printed circuit board, and a flexible membrane;

a counter-pressure chamber, wherein the counter-pressure chamber is a space between the transparent top and the flexible membrane;

a main pressure chamber, wherein the main pressure chamber is a space between the flexible membrane and the lower housing,

the counter-pressure chamber having a first open mode wherein the counter-pressure chamber is in atmospheric communication with the main pressure chamber, and the counter-pressure chamber having a second closed mode wherein the counter-pressure chamber is sealed from the main pressure chamber;

at least one battery located within the upper housing; and

[a] the lower housing which is internally threaded to mate with a tire valve assembly.

Please add **NEW** claims 27-32 as follows:

27. (New) A tire pressure monitoring device for monitoring tire pressure, said monitoring device comprising:

a housing having a first pressure chamber, a second pressure chamber,

and a flexible membrane, wherein said first and second pressure chambers are separated by a flexible membrane, wherein the first pressure chamber is calibrated with air from a tire; and

a signaling means for emitting a warning signal when a pressure within the first pressure chamber is greater than a pressure within the second pressure chamber; wherein the housing is adapted to be mounted onto a tire stem.

28. (New) A tire pressure monitoring device for monitoring tire pressure, said monitoring device comprising:

a housing having a first pressure chamber in communication with a second pressure chamber, wherein the first pressure chamber having a first open mode wherein the first pressure chamber is in atmospheric communication with the second pressure chamber, and the first pressure chamber having a second closed mode wherein the first pressure chamber is sealed from the second pressure chamber; and

a flexible membrane positioned between the first pressure chamber and the second pressure chamber.

29. (New) The tire pressure monitoring device of claim 27 wherein said housing includes threads for mounting said tire pressure monitoring device onto a tire system.

30. (New) The tire pressure monitoring device of claim 10 wherein said lower housing body includes threads for mounting said tire pressure monitoring device onto the tire valve.

31. (New) A tire pressure monitoring device comprising:

means for mounting the device onto a tire stem;

means for calibrating the device to air pressure in the tire at an initial point in time with air from within the tire;

means for indicating at a subsequent point in time that air pressure in the tire has decreased beyond a pre-determined pressure difference, as compared to the pressure in the tire at said initial point in time.

32. (New) A tire pressure monitoring device comprising:

a housing having a first pressure chamber in communication with a second pressure chamber, wherein the first pressure chamber having a first open mode wherein the first pressure chamber is in atmospheric communication with the second pressure chamber, and the first pressure chamber having a second closed mode wherein the first pressure chamber is sealed from the second pressure chamber; and

a flexible membrane positioned between the first pressure chamber and the second pressure chamber; and

a signaling means for emitting a warning signal when a pressure within the first pressure chamber is greater than a pressure within the second pressure chamber; wherein the housing is adapted to be mounted onto a tire stem.